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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

DN 99-009

In re application of: Weese *et. al.*

Serial No.: 09/520,249

Group No.: 1714

Filed: 03/07/2000

Examiner: Edward J. Cain

For: AQUEOUS ADDITIVE SYSTEMS FOR POLYMERIC MATRICES

Declaration of Jane E. Weier Under 37 CFR 1.132

[0001] I, Jane E. Weier, of 110 Featherbed Ln, Hopewell, NJ, received my Ph.D. in Chemistry from U. California at Berkeley in 1989. I have been employed by Rohm and Haas Company since 1989, currently as a Technical Service Manager in the Plastics Additives Research and Applications Department. I have been involved in research and development of additives for plastic matrices and their performance since 1989. I am a member of the American Chemical Society, Society of Plastics Engineers, and I have authored several published articles involving impact modifiers and their applications, including a recent chapter in the book "Polymer Dispersions and their Industrial Applications" (D. Urban and K. Takamura, ed., 2002).

[0002] I have carefully reviewed the document GB 1 230 185 ("GB'185). In my opinion, a person of ordinary skill in the art would understand GB'185 to be teaching that an additive can be blended with PVC in either of two ways:

- 1) Additive in powder form blended with PVC in powder form, OR

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- 2) Additive in latex form blended with PVC in suspension or latex (emulsion) form.

That is, in my opinion, a person of ordinary skill in the art would not interpret GB'185 to be disclosing or suggesting the possibility of blending additive in latex form with PVC in the form of slurry, wetcake, or powder.

[0003] GB'185 discusses methods of blending on p. 3, lines 15 to 23. GB'185 first states:

The blending can be accomplished, in general, with the materials in the powder state by means of mixing machine such as a roll mill or a Banbury mixer.

In this first method, a person of ordinary skill in the art would understand that GB'185 is teaching that both the additive and the PVC are in powder form at the time the blending operation is performed.

[0004] GB'185 proceeds to further state,

Alternatively, the latex obtained in this invention and the polyvinyl chloride can be blended, and the resulting blend is subjected to salting out or acid precipitation or is spray dried to produce a blended resin composition.

A person of ordinary skill in the art would understand that, in this "alternative" method of GB'185, a blend is made that could usefully be subjected to salting out, acid precipitation, or spray drying. A person of ordinary skill in the art would know that PVC is normally manufactured in the form of latex or suspension, and either of these forms would be useful in the "alternative" method of GB'185. That is, an ordinary and well understood process would involve blending an additive in latex form with PVC in latex or suspension form and then subjecting the blend to salting out, acid precipitation, or spray drying. Spray drying technology requires the sample to be initially in liquid form, as the technique involves the dispersal of the feed liquid into fine droplets which are subsequently dispersed and suspended in a chamber of heated gas in order to form the final dried particles. Salt or acid precipitation is a separation technology that involves the agglomeration and recovery of solid-state chemicals or particles that are suspended in a

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liquid medium at the start of the process. A person of ordinary skill in the art would conclude that none of salting out, acid precipitation, or spray drying, could usefully be applied to a blend in which any one ingredient in the form of a slurry, wetcake, or powder.

[0005] In all of the Examples of GB'185, the additive is precipitated and dried (p. 3, lines 75-83 and p. 4, lines 42-48) and then blended with PVC. The blend is "kneaded for 3 minutes by rollers" (p. 3, lines 87-88), which informs a person of ordinary skill in the art that the PVC is also in powder form.

[0006] In sum, neither the Examples of GB'185 nor the paragraph at p. 3, lines 15-23 of GB'185 discloses or suggests making a blend of additive in latex form with PVC in the form of slurry, wetcake, or powder. Further, no other portion of GB'185 makes such a disclosure or suggestion.

[0007] I declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under the United States Code and such willful statements may jeopardize the validity of any patent application or patent issued thereon.



Jane E Weier

Date: Dec. 15, 2005